#### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 13.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012236 Address: 333 Burma Road **Date Inspected:** 22-Feb-2010

City: Oakland, CA 94607

OSM Arrival Time: 1000 **Project Name:** SAS Superstructure **OSM Departure Time:** 1830 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Oregon Iron Works Clackamas, Or. **Location:** Clackamas, OR

**CWI Name:** M. Gregson, J. Salazar **CWI Present:** Yes No **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Hinge K Pipe Beams

### **Summary of Items Observed:**

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

### Hinge-K Pipe Beam Assembly 102A-2:

The QA Inspector noted that the a109 Post Tension Cap plate had been previously fit-up and 9 each 1 ½" tension rods had been previously placed between the a109 Cap plate and a110 Base plate. The QA Inspector noted that OIW placed the rods to limit the distortion of the Cap plate prior to the Submerged Arc Welding of the Partial Joint Penetration (PJP) weld joints.

The QA Inspector randomly noticed that the bearing fit between the a109 Post Tension Cap plate and internal stiffeners had been previously verified and accepted by OIW QC Inspector Rob Walters. QC Inspector Walters explained that he had utilized a set of feeler gauges and explained that the bearing surface had no gaps present. The QA Inspector noted that QC Inspector Walters had also previously verified the joint fit up on the Cap Plate to the a106, b106 and ab106 HPS 485W stiffeners and accepted. The QA Inspector noted that the contract designates these PJP's as AWS D1.5 TC-P4-S. The QA Inspector measured the Bevel prep angle to be 60 degrees and measured a root opening of 0 mm, on this date. The QA Inspector then measured the bearing surface between the internal stiffeners and Cap plate and noted that there was approximately 100% contact. The QA Inspector utilized a .5 mm feeler gauge and accessed the internal stiffeners through the existing drilled holes in the Cap plate. The QA Inspector noted that the bearing surface and fit up of the Cap plate, appears to be in compliance with the contract requirements. The QA Inspector later noticed that OIW was setting up the Cooper heat to begin heating

# WELDING INSPECTION REPORT

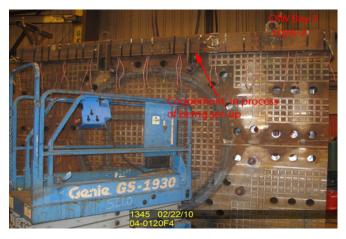
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up the PJP weld joints. The QA Inspector noted that the Cooper heat was currently being set-up on the PJP weld joints # W2-19 and #W2-20.

Material, Equipment, and Labor Tracking (MELT)

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project. The QA Inspector observed at Oregon Iron Works: 2 OIW production personnel and 2 QC Inspectors.





#### **Summary of Conversations:**

As noted above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Adame,Joe	QA Reviewer